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Analysis of Selected Provisions of Proposed Energy Legislation: 2003

Table 1. Reduction in Energy Intensity by Federal Buildings, House Bill Section 11002 (Percent)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Reduction Relative to 2001	2.0	4.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0

Table 2. Summary of Key Results of Four CAFE Cases[1] Compared to the Reference Case, 2010 and 2020

	2000	Reference Case[2]	Sensitivity	S. 804	S. 804 Advanced Date	S. 517
				2010		
Light Vehicle Consumption (billion gallons)	124.9	154.0	152.4	147.6	146.6	147.4
Net Petroleum Imports (million barrels per day)	10.49	14.30	14.19	13.91	13.83	13.90
World Oil Price (2001$)	28.33	23.87	23.87	23.64	23.59	23.64
GDP (billion 2001$)	10,091	13,466	13,464	13,447	13,437	13,447
Light Vehicle Carbon Equivalent Emissions (million metric tons)	297.9	366.0	362.1	350.9	348.4	350.3
Average New Car Fuel Economy (miles per gallon)	28.90	29.58	30.82	29.53	29.52	33.44
Average New Light Truck Fuel Economy (miles per gallon)	21.08	22.52	23.25	25.56	26.41	25.05
Average New Car Horsepower	165	202	194	202	202	174
Average New Light Truck Horsepower[3]	193	237	235	203	203	215
Average New Car Weight (pounds)	3087	3257	3160	3258	3258	2826
Average New Light Truck Weight (pounds)[3]	4257	4554	4513	4053	3966	4105
				2020		
Light Vehicle Consumption (billion gallons)		181.8	176.3	167.1	166.8	159.4
Net Petroleum Imports (million barrels per day)		16.69	16.38	15.86	15.83	15.40
World Oil Price (2001$)		25.22	25.22	24.79	24.73	24.54
GDP (billion 2001$)		18,084	18,078	18,072	18,081	18,056
Light Vehicle Carbon Equivalent Emissions (million metric tons)		432.1	419.2	397.3	396.6	379.1
Average New Car Fuel Economy (miles per gallon)		29.63	31.79	29.53	29.53	35.84
Average New Light Truck Fuel Economy (miles per gallon)[3]		23.18	23.57	26.48	26.47	26.49
Average New Car Horsepower		220	198	220	220	168
Average New Light Truck Horsepower[4]		252	249	206	206	206
Average New Car Weight (pounds)		3359	3100	3360	3360	2723
Average New Light Truck Weight (pounds)[4]		4784	4721	3984	3960	3936

[1] The four cases summarized here are not representative of the CAFÉ provisions in the current House and Senate bills.
[2] The Reference Case also represents the H.R.4 Case.
[3] Average new light truck fuel economy for the Reference and Sensitivity Cases represent light trucks less than 8,500 pounds gross vehicle weight. Light truck fuel economy shown for the S.804, S.804 Advanced Date, and S.517 Cases represent light trucks less than 10,000 pounds gross vehicle weight.
[4] The values shown in the table represent vehicles less than 8,500 pounds gross vehicle weight. NEMS does not address the horsepower or weight aspects of Class 2b vehicles (8,500 to 10,000 pound vehicles).

Source: National Energy Modeling System runs: s804base.d020702b, s8045and10.d020702a, s804base.d020702b, s804advd.d021102a, and s517cafe.d022502a.

Table 3. Summary of Petroleum Products Supplied by Sector and Product from *AEO2003* (million barrels per day)

	2001	2005	2010	2013	2015	2020	2025
Refined Petroleum Products Supplied							
Residential and Commercial	1.2	1.2	1.2	1.2	1.2	1.1	1.1
Industrial	4.7	4.9	5.3	5.6	5.7	6.0	6.3
Transportation	13.3	14.3	16.3	17.5	18.2	19.8	21.5
Electric Generators	0.6	0.2	0.2	0.2	0.2	0.2	0.2
Total	19.7	20.5	23.0	24.4	25.2	27.1	29.2
Refined Petroleum Products Supplied							
Motor Gasoline	8.7	9.4	10.7	11.4	11.8	12.8	13.8
Jet Fuel	1.7	1.7	1.9	2.1	2.2	2.5	2.7
Distillate Fuel	3.8	4.0	4.6	4.9	5.1	5.4	5.9
Residual Fuel	1.0	0.6	0.6	0.6	0.6	0.6	0.6
Other	4.6	4.8	5.2	5.5	5.6	5.9	6.2
Total	19.7	20.5	23.0	24.4	25.2	27.1	29.2

Source: Energy Information Administration, *Annual Energy Outlook 2003,* DOE/EIA-0383(2003) (Washington, DC, January 2003), Table A11, web site http://www.eia.doe.gov/oiaf/aeo/pdf/0383(2003).pdf.

Table 4. Summary of Petroleum Products Supplied by Sector and Product including NHTSA's Recent Increase in CAFE (million barrels per day)

	2001	2005	2010	2013	2015	2020	2025
Refined Petroleum Products Supplied							
Residential and Commercial	1.2	1.2	1.2	1.2	1.2	1.1	1.1
Industrial	4.7	4.9	5.3	5.5	5.6	6.0	6.3
Transportation	13.3	14.3	16.2	17.3	18.0	19.5	21.3
Electric Generators	0.6	0.2	0.2	0.2	0.2	0.2	0.3
Total	19.7	20.5	22.9	24.2	25.0	26.9	28.9
Refined Petroleum Products Supplied							
Motor Gasoline	8.7	9.4	10.5	11.2	11.6	12.5	13.6
Jet Fuel	1.7	1.7	1.9	2.1	2.2	2.5	2.7
Distillate Fuel	3.8	4.0	4.6	4.9	5.1	5.4	5.9
Residual Fuel	1.0	0.6	0.6	0.7	0.7	0.7	0.7
Other	4.6	4.8	5.2	5.4	5.5	5.8	6.1
Total	19.7	20.5	22.9	24.2	25.0	26.9	28.9

Source: Energy Information Administration, *Analysis of S.139, the Climate Stewardship Act of 2003,* SR/OIAF/2003-02, (Washington, DC, June 2003), web site http://www.eia.doe.gov/oiaf/servicerpt/ml/pdf/sroiaf(2003)02.pdf.

Table 5. Renewables Fuel Standard/MTBE Ban Based on AEO2002 (million barrels per day)

	2001	2013	
		Reference Case[a]	RFS/Total Ban
Total Petroleum Products Supplied	19.81	24.08	24.04
Ethanol Content supplied	0.112	0.193	0.324
Natural Gas Content supplied	1.81	2.49	2.48
Oil content supplied	17.24	21.56	21.47

a Includes consideration of the MTBE ban in the 17 states that have already passed laws banning MTBE.

Note: Individual supplies may not add to the total due to unaccounted for supplies and losses.

Source: Energy Information Administration, Office of Integrated Analysis and Forecasting, National Energy Modeling System date codes Ens1mXoX.d082302b and Ens1m087.d082302c.

Table 6. Industrial Petroleum Consumption, Selected Products, 2001 (quadrillion Btu)

	2001
LPG Feed	1.90
Petrochemical Feed	1.14
Asphalt	1.26
Non-combustion Total	4.29
Petroleum Coke	0.84
Still Gas	1.44
Byproduct Total	2.28
Total Petroleum	8.79

Source: Unpublished detail from Energy Information Administration, *Annual Energy Outlook 2003,* DOE/EIA-0383(2003) (Washington, DC, January 2003), web site http://www.eia.doe.gov/oiaf/aeo/pdf/0383(2003).pdf